

Figure 1. Series lateral switch single-pole-double throw

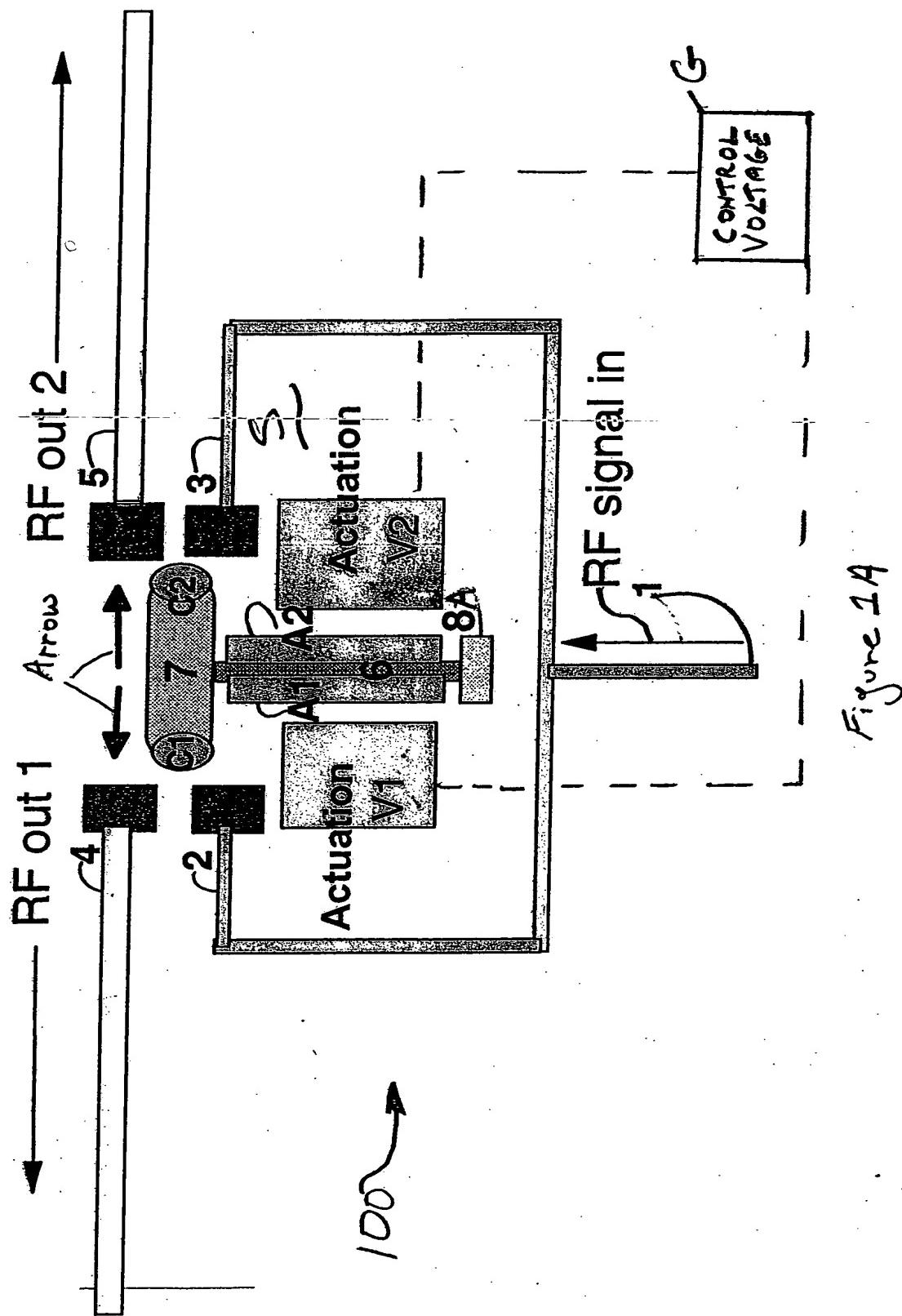


Figure 2A

Figure 1. Different anchoring schemes for lateral switch

Figure 1b: Front cross-sectional view of beam 6 with anchor
Free-free beam with rectangular stopper allows lateral movement of the switch element 6

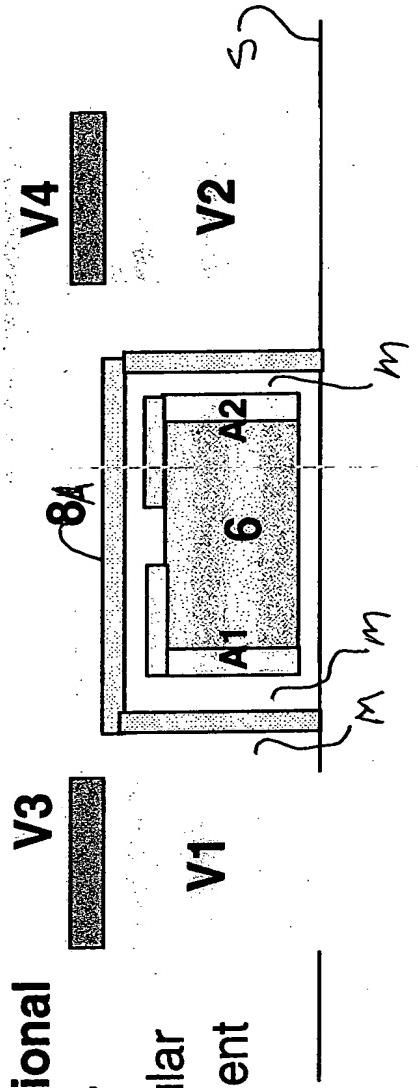


Figure 1c: Side view of anchor
Anchoring through a via 9 allows lateral movement of the switching element 6 to take place

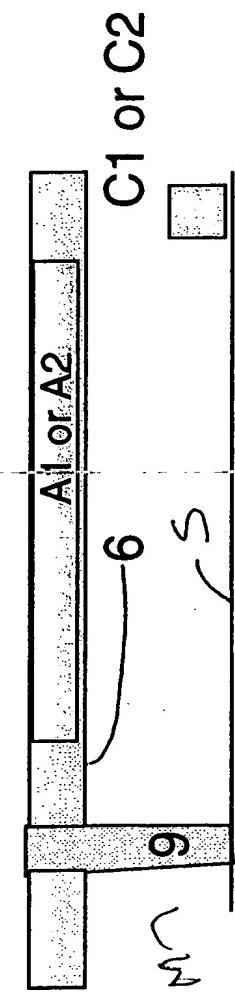
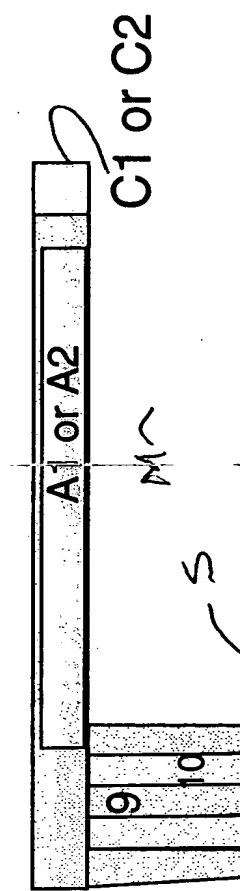


Figure 1d: Side view of anchor
Anchoring with vias 9 embedded in insulator creating a cantilever-type beam 6 with a fixed anchor



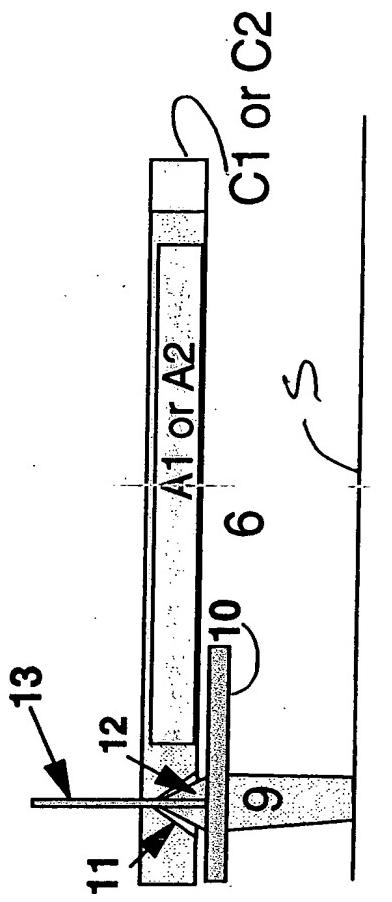


Figure 1e: Side view of anchor

Anchoring through a pivot point created by a metal via 9 with conical tip 12 and a stopper 10. The conical tip fits into a groove 11 within beam 6. A bracket 13 is used to confine the beam 6 movement in the vertical direction

Figure 2. Torsional lateral switch double-pole-double throw

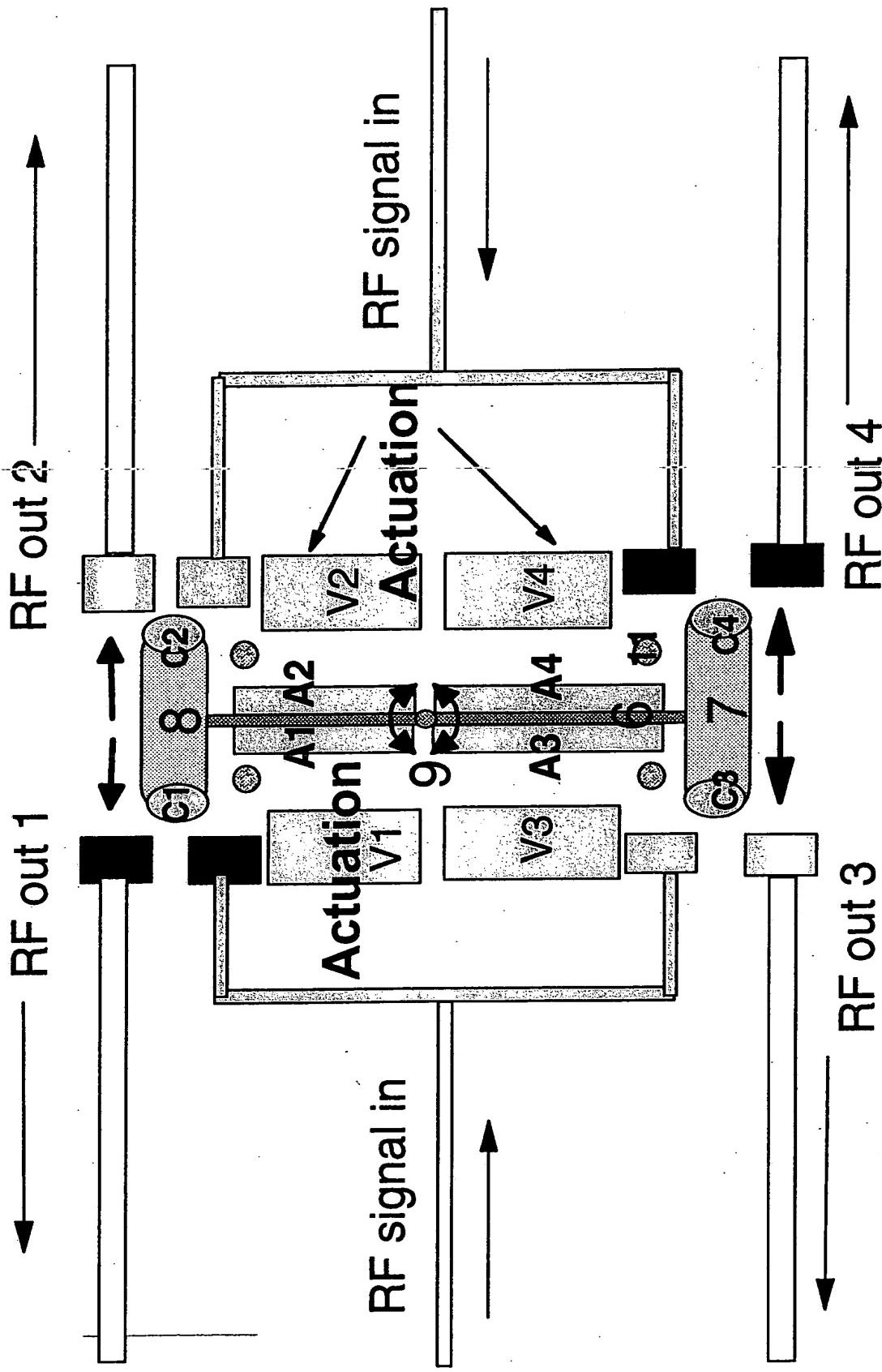


Figure 3. Torsional lateral switch single-pole-double throw

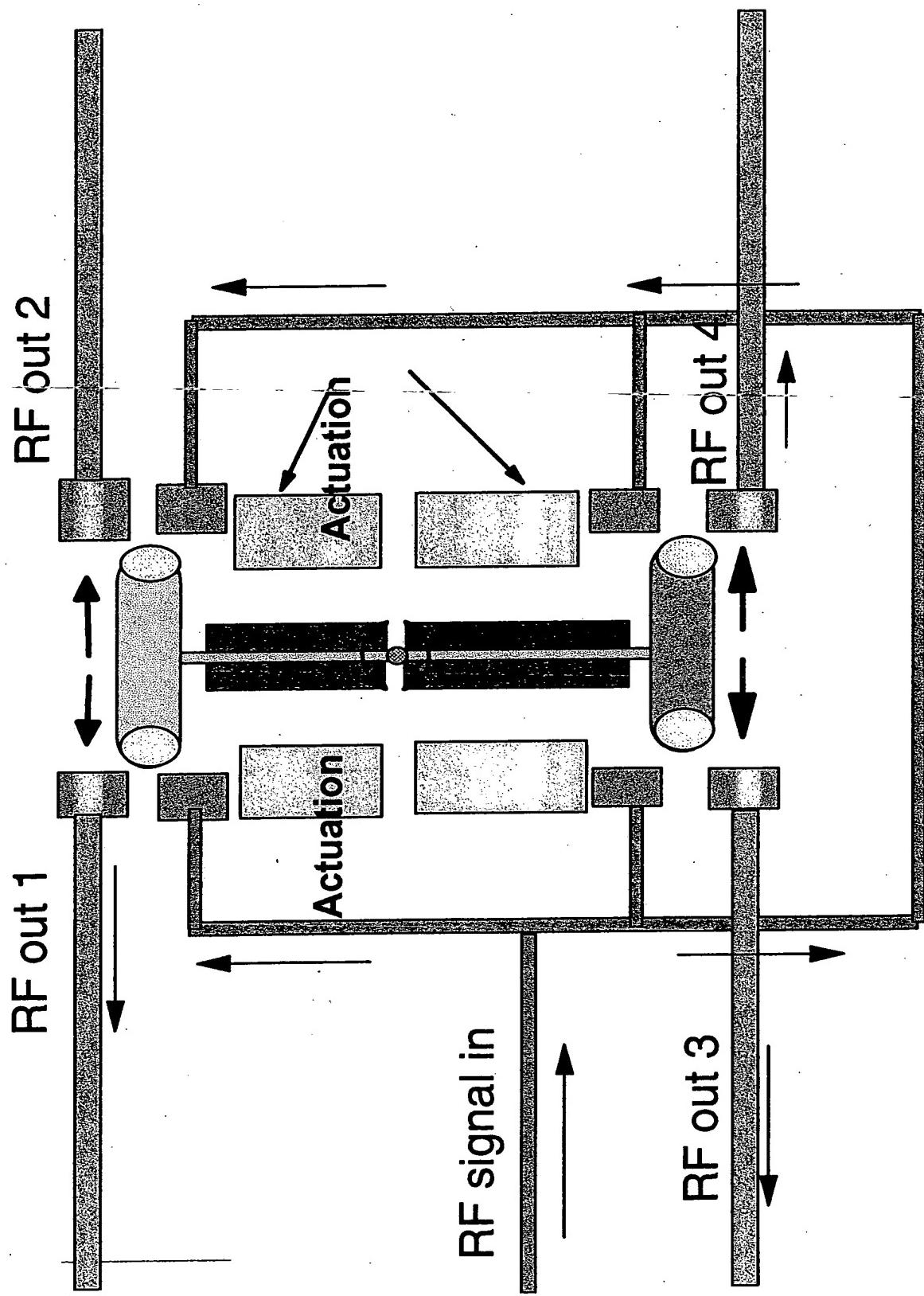


Figure 4. Single or double-pole-four-throw switch using v-shaped lateral beams

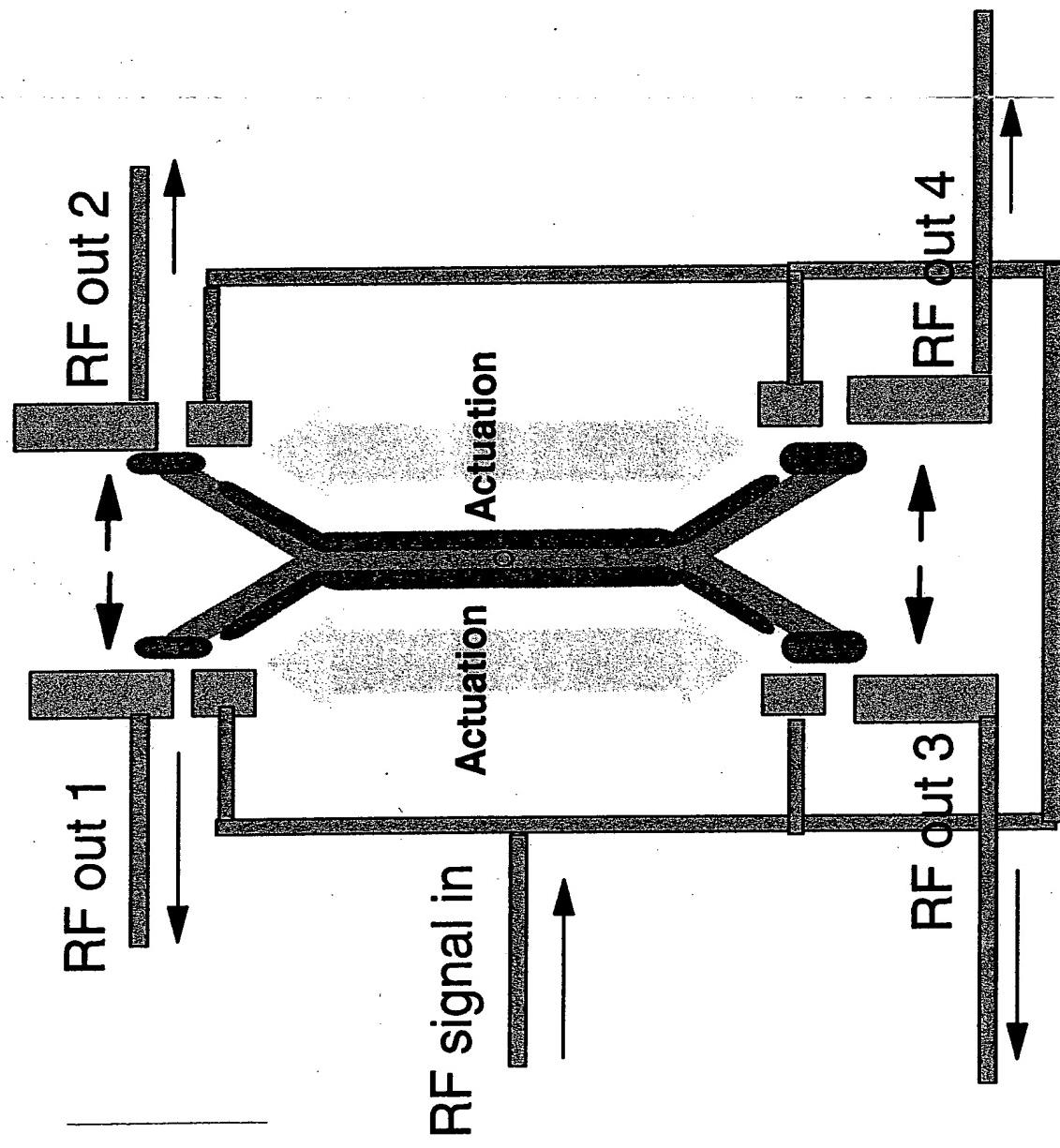


Figure 5. Torsional single-pole or double-pole-double-throw switch using V-shaped beams

